

CLAIMS

What is claimed is:

1. A fiber-forming bushing comprising:
a tip plate comprising at least two tip sections and section spacing
5 between the tip sections; and
a lateral support extending laterally along the section spacing.
2. The bushing according to claim 1, wherein the support is thermally and electrically insulated from the tip plate.
3. The bushing according to claim 1, wherein the support is coated with a ceramic material.
4. The bushing according to claim 1, wherein a layer of zirconium oxide is
15 applied to the support.
5. The bushing according to claim 1, wherein the support is hollow.
6. The bushing according to claim 1, wherein the lateral support has
20 opposing ends and a nipple extending from each of the opposing ends so that the nipples are in fluid communication with the lateral support.

7. A fiber-forming bushing comprising:

a bushing body;

a throat provided at an upper end of the bushing body;

5 an elongate tip plate provided at a lower end of the bushing body, the tip plate comprising at least two tip sections and section spacing between the tip sections;
a support extending longitudinally along the tip plate; and
a lateral support extending laterally along the section spacing.

10 8. The bushing according to claim 7, wherein the supports are thermally and electrically insulated from the tip plate.

9. The bushing according to claim 7, wherein each of the supports is coated with a ceramic material.

15 10. The bushing according to claim 7, wherein a layer of zirconium oxide is applied to the supports.

11. The bushing according to claim 7, wherein the supports are hollow.

20 12. The bushing according to claim 11, the each of the supports has opposing ends and a nipple extending from each of the opposing ends so that the nipples are in fluid communication with the supports.

25 13. The bushing according to claim 11, wherein the support and the lateral support traverse one another.

14. The bushing according to claim 11, wherein the lateral support is comprised of two hollow members having a fluid conduit extending across the support and between the hollow members.

5 15. The bushing according to claim 14, wherein the conduit is a generally U-shaped conduit having two legs, each of the legs being connected to a corresponding one of the hollow members so that the conduit is in fluid communication with the hollow members, the U-shaped conduit extending downward and across the support.

10 16. A fiber-forming bushing comprising:
a bushing body;
a throat provided at an upper end of the bushing body;
an elongate tip plate provided at a lower end of the bushing body, the tip plate comprising at least two tip sections and section spacing between the tip sections;
15 a support comprising an elongate center support extending between a pair of laterally extending end supports, the center support extending longitudinally along the tip plate, the end supports extending laterally along opposing ends of the tip plate; and
a lateral support extending laterally along the section spacing and
20 between the end supports.

17. The bushing according to claim 16, wherein the supports are thermally and electrically insulated from the tip plate.

25 18. The bushing according to claim 16, wherein each of the supports is coated with a ceramic material.

19. The bushing according to claim 16, wherein a layer of zirconium oxide is applied to the supports.

20. The bushing according to claim 16, wherein the supports are hollow and the center support is in fluid communication with the end supports.

21. The bushing according to claim 20, wherein the end supports and opposing ends of the lateral support have a nipple extending therefrom so that the nipples are in fluid communication with the end supports and the lateral support.

22. The bushing according to claim 20, wherein the center support and the lateral support traverse one another.

23. The bushing according to claim 20, wherein the lateral support is comprised of two hollow members having a fluid conduit extending across the center support and between the hollow members.

24. The bushing according to claim 23, wherein the conduit is a generally U-shaped conduit having two legs, each of the legs being connected to a corresponding one of the hollow members so that the conduit is in fluid communication with the hollow members, the U-shaped conduit extending downward and across the center support.